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WEAPONS OF MASS DESTRUCTION AND THE HOMELAND THREAT:  
DETERRENCE THROUGH CONSEQUENCE MANAGEMENT

by

David A. Tagg  
Major USMC

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

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The ability of the United States to protect its global interests, fulfill its responsibilities in the world community, and meet the challenges of the future depends on its ability to exercise the strategic concepts of decisive force, power projection, overseas presence, and strategic agility. Through asymmetric employment of Weapons of Mass Destruction (WMD), potential adversaries can attack the United States homeland, threaten America's critical strengths, and undermine the military's ability to maintain full spectrum dominance, which is the key to achieving these strategic concepts. America's WMD counterproliferation strategy depends, in part, on an effective consequence management program to deter potential adversaries from employing WMD against the U.S. homeland. Progress has been made in implementing this program. However, failure to define the desired outcome for the national strategy, poor interagency coordination, and misdirected training continue to limit the overall effectiveness of the program. Prompt and urgent implementation of remedial measures is suggested for achieving near-term improvement. The current state of consequence management demands such improvement if adversarial attacks are to be adequately deterred.

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## Abstract

### WEAPONS OF MASS DESTRUCTION AND THE HOMELAND THREAT: DETERRENCE THROUGH CONSEQUENCE MANAGEMENT

The ability of the United States to protect its global interests, fulfill its responsibilities in the world community, and meet the challenges of the future depends on its ability to exercise the strategic concepts of decisive force, power projection, overseas presence, and strategic agility. Through asymmetric employment of Weapons of Mass Destruction (WMD), potential adversaries can attack the United States homeland, threaten America's critical strengths, and undermine the military's ability to maintain full spectrum dominance, which is the key to achieving these strategic concepts. America's WMD counterproliferation strategy depends, in part, on an effective consequence management program to deter potential adversaries from employing WMD against the U.S. homeland. Progress has been made in implementing this program. However, failure to define the desired outcome for the national strategy, poor interagency coordination, and misdirected training continue to limit the overall effectiveness of the program. Prompt and urgent implementation of remedial measures is suggested for achieving near-term improvement. The current state of consequence management demands such improvement if adversarial attacks are to be adequately deterred.

# **Weapons of Mass Destruction and the Homeland Threat: Deterrence Through Consequence Management**

## **Introduction**

“Because terrorist use of WMD [weapons of mass destruction] is difficult to deter, prevent, or ameliorate and is potentially catastrophic in most cases, it is the greatest threat to U.S. national security today and will likely remain so in the foreseeable future.”<sup>1</sup> Nuclear, biological, chemical, and radiological weapons are no longer the exclusive domains of first world powers. Rather, the list of players capable of developing and exploiting these weapons of mass destruction (WMD) is growing rapidly and includes a variety of both state and non-state actors (NSAs). The ability of the United States to protect its global interests, fulfill its responsibilities in the world community, and meet the challenges of the future depends on its ability to exercise the strategic concepts of decisive force, power projection, overseas presence, and strategic agility.<sup>2</sup>

The key to achieving these strategic concepts lies in achieving full spectrum dominance across the entire range of potential military operations through the interdependent application of dominant maneuver, precision engagement, focused logistics, and full dimensional protection.<sup>3</sup> Asymmetric use of WMD by potential adversaries can deny full spectrum dominance by directly threatening the U.S. homeland and America’s critical strengths: the political institutions, the industrial infrastructure, the financial infrastructure, the transportation and communications networks, the military forces, and the safety, security and well-being of American citizens.

The United States has sought to address this threat through a strategy of counterproliferation based on deterrence—“the prevention from action by fear of the consequences.”<sup>4</sup> Effective deterrence depends on the availability of a range of nuclear and

conventional response capabilities, as well as active and passive defenses, counterforce and consequence management capabilities, and supporting command, control communications and intelligence.<sup>5</sup> Whether or not the United States' homeland consequence management capabilities are adequately prepared to deal with the threat of terrorist employment of WMD is the question addressed in this paper.

### **Current WMD Threat**

“Military and intelligence experts believe that the greatest threat to the United States from WMD is posed by terrorist groups or individuals, because nations that employed such weapons would face disproportionate retaliation.”<sup>6</sup> The potential for terrorist attacks against the U.S. homeland, employing extremely destructive NBC weapons, represents a significant vulnerability that can be regarded as “small” only in the sense that few aggressors have chosen to exploit it.<sup>7</sup> At least 25 countries now possess, or are in the process of acquiring and developing, capabilities to inflict mass casualties and destruction using nuclear, biological and chemical (NBC) weapons. A larger number of countries are capable of producing such weapons, potentially on short notice.<sup>8</sup>

Although terrorist NBC attacks have been rare in the past, the reasons for this infrequency are eroding.<sup>9</sup> The underlying technology for production and employment of NBC weapons is becoming increasingly accessible and the number of potential aggressors possessing these weapons or access to the capability for production and employment is growing. A free and open society cannot construct a perfect defense against terrorist attacks. As a result, virtually all potential state, and non-state aggressors could employ terrorist means of delivery against targets in the United States with good chances of success.<sup>10</sup>



Nuclear weapons are within the reach of tens of states. The most significant constraint on both state and non-state acquisition is the ability to produce plutonium or highly enriched uranium (HEU). If this obstacle is overcome, either through the theft or the purchase of fissile material, any state with a reasonable technical and industrial infrastructure or an exceptionally capable NSA could design and build a nuclear weapon.<sup>11</sup>

Many states and moderately sophisticated NSAs are capable of producing improvised but effective biological weapons. The procedures for culturing microorganisms or growing and purifying toxins are inexpensive and could be accomplished by someone with college level training and a basic knowledge of laboratory techniques.<sup>12</sup> Agents can be chosen based on the intended target (i.e., humans, animals or plants), their effects (i.e., sicken, incapacitate or kill), their ability to spread beyond those initially exposed, their degree of resistance to medical treatment, and their ease of cultivation and dissemination.<sup>13</sup> The most significant technical obstacle in fabricating a biological weapon is development of the means for effectively disseminating the agent.<sup>14</sup> Nevertheless, all the equipment required for production is dual-use and is available through commercial sources, and equipment to aerosolize biological agents is available as virtually off-the-shelf systems produced for legitimate industrial, medical, and agricultural applications.<sup>15</sup> Biological weapons acquisition has few externally observable indicators that would arouse the suspicions of law enforcement agencies.<sup>16</sup>

Chemical weapons suitable for mass-casualty attacks are the easiest of the NBC weapon types to acquire and can be obtained by virtually any state and by NSAs with moderate technical skills. Production procedures for some agents are relatively simple and it is possible to manufacture sufficient quantities for mass-casualty attacks in a kitchen or

basement. Although the effectiveness of an outdoor chemical weapons attack would be limited by the scale of the production facilities and the number of weapons used, a bare-bones effort could produce a reliable weapon capable of killing thousands of people if used in a crowded, enclosed space.<sup>17</sup>

NBC weapons could be delivered covertly against a variety of civilian, military or political targets with good chances of success and only limited risk of detection and attribution. This makes detection unlikely until after the weapon has been detonated or the harmful agent released. The effects of a successful covert NBC attack will vary widely depending on the nature of the weapon and the target, and the effectiveness of the means of delivery.<sup>18</sup>

There are three reasons why the threat of NBC attack by an international adversary is increasing. First, the end of the Cold War and the changing international environment are producing stronger motives for NBC weapons use and weaker constraints against their use. States may seek to acquire or use NBC weapons to compensate for the loss of superpower patronage, to deter a more powerful adversary, to win on the battlefield against a more powerful adversary, to “decapitate” an opposing state by killing its senior officials, to destabilize a society by undermining its economic strength or political will, or to exact revenge. Second, covert WMD attack could hold important advantages over more conventional military uses of NBC weapons, especially against a more powerful opponent. For example, covert attacks on civilian populations may be more effective in causing panic and sapping political will; covert delivery may allow an attacker to escape identification and subsequent retribution; covert delivery may be the only viable option for employment of NBC agents by states without military means of delivery; and covert NBC attack can

maximize the element of surprise – a crucial factor. Third, there is no reason to believe the threat of covert NBC delivery is significantly less serious than the threat of NBC delivery by ballistic missile.<sup>19</sup> In general, a ballistic missile WMD attack would be relatively easy to detect, but difficult to defeat, while a covert WMD attack would be difficult to detect, but relatively easy to defeat, if identified in advance.<sup>20</sup>

There is a growing consensus among experts and government officials that the threat of non-state violence involving WMD is becoming one of the most serious security challenges of the modern era. This dynamic can be attributed to changes in the nature of non-state violence, the ease of acquiring NBC weapons, and the evolving role of the United States in the world community. The threat of NBC terrorism is becoming more serious over time because societal trends are increasing the number of groups that are both capable of acquiring weapons of mass destruction and interested in inflicting mass casualties.<sup>21</sup> The precise reasons for the increased interest in causing mass casualties are unclear. However, five emerging trends reflect the shift toward increasingly lethal non-state violence: terrorist acts and violence motivated by religion; local opposition to U.S. influence and military presence in the Persian Gulf region; right-wing terrorism; “amateur” terrorists; and extreme acts of violence motivated by racism and ethnic hatred.<sup>22</sup>

### **Government Response**

“The Federal Response Plan (FRP) establishes a process and structure for the systematic, coordinated, and effective delivery of Federal assistance to address the consequences of any major disaster or emergency declared under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (42 U.S.C. 5121, et seq.).<sup>23</sup> Federal assistance provided under the FRP augments State and local response efforts. The

FRP organizes the types of Federal response assistance that a state is most likely to need under 12 Emergency Support Functions (ESFs) and designates a primary agency for each function. Additionally, it provides linkages to other Federal emergency operations plans developed for specific incidents.<sup>24</sup>

The Terrorist Incident Annex to the FRP defines the policies and structures to coordinate crisis management with consequence management in the event of a terrorist incident.<sup>25</sup>

Under the Stafford Act and Executive Orders 12148, Federal Emergency Management, and 12656, Assignment of Emergency Preparedness Responsibilities, FEMA has been delegated primary responsibility for coordinating Federal emergency preparedness, planning, management, and disaster assistance functions. FEMA also has been delegated responsibility for establishing Federal disaster assistance policy. . . . [and] has the lead in developing and maintaining the FRP.<sup>26</sup>

In response to the increasing WMD threat, the President issued Presidential Decision Directive 39 (PDD-39), U.S. Policy on Counterterrorism, in June 1995. PDD-39 elaborated a national policy, a strategy, and an interagency coordination and management structure to combat terrorism. Additionally, it expanded roles, responsibilities, and mechanisms for combating domestic terrorism. The strategy consisted of three main elements:

1. Reduce vulnerabilities and prevent and deter terrorist acts before they occur.
2. Conduct crisis management—respond to terrorist acts that do occur and apprehend and punish terrorists.
3. Conduct consequence management—manage the consequences of terrorist acts.

Restore capabilities to protect public health and safety, provide essential government services, and provide emergency relief.

PDD-39 also identified specific actions that agencies are to conduct within each element of the strategy.<sup>27</sup>

PDD-39 validated and reaffirmed lead agency responsibilities for all aspects of the U.S. counterterrorism effort and designated the Department of Justice (DOJ) as the lead agency for responding to threats or acts of terrorism in the United States. The DOJ, in turn, assigned lead responsibility for operational response to the Federal Bureau of Investigation (FBI). Within that role, the FBI is responsible for on-scene management during the crisis management phase of a WMD incident. The Federal Emergency Management Agency (FEMA) was designated as the lead agency responsible for consequence management within U.S. territory. It retains authority and responsibility to act in that capacity throughout the Federal response. In order to eliminate confusion about overall responsibility for oversight and to ensure there is one Lead Federal Agency (LFA) during a terrorist incident, “PDD-39 directs FEMA to support the DOJ (as delegated to the FBI) until the Attorney General transfers the overall LFA role to FEMA.”<sup>28</sup> PDD-39 directs FEMA to ensure the adequacy of the Federal Response Plan (FRP) for coordination of consequence management activities in response to terrorist attacks against large populations in the United States. FEMA is also responsible for testing and ensuring the adequacy of the states’ response plans and capabilities.<sup>29</sup>

In 1996, Congress passed Public Law 104-201, Title XIV of the National Defense Authorization Act for Fiscal Year 1997. This legislation (commonly known as Nunn-Lugar-Domenici) directs the Secretary of Defense to assist federal, state, and local government agencies with training, advice, equipment, and other actions to strengthen domestic local capabilities to respond to and manage the consequences of a terrorist WMD incident.<sup>30</sup> DOD established the Domestic Preparedness Program to fulfill this legislative requirement.

In October 1999, the Secretary of Defense established a standing, permanent headquarters element (Joint Task Force-Civil Support (JTF-CS)) subordinate to United States Joint Forces Command (USJFCOM) to provide military support to mitigate the effects and manage the consequences of a WMD attack within the United States, its territories or possessions.<sup>31</sup> The mission of JTF-CS is to plan and integrate the Department of Defense's (DOD's) support (i.e., detection, decontamination, medical and logistics) to the LFA for WMD events in the United States.<sup>32</sup> JTF-CS support encompasses both crisis management before an NBC event and consequence management activities following the event. During crisis management operations, JTF-CS will support the LFA through FEMA by assisting with the conduct of planning for any projected consequence management missions. When deployed, JTF-CS will remain under the operational control (OPCON) of the supported combatant commander.<sup>33</sup>

U.S. counterproliferation (CP) strategy is articulated to commanders through Chairman of the Joint Chiefs of Staff (CJCS) Concept Plan (CONPLAN) 0400-96. This document provides a range of options for countering the proliferation of NBC weapons during peacetime and crisis, and serves as the campaign plan for U.S. military efforts to counter the spread of WMD. CONPLAN 0400 addresses all available means, including consequence management. Additionally, the plan provides direction to combatant commanders for implementation of national-level CP policy in terms of operational objectives and supporting tasks within their areas of operations. U.S. Joint Chiefs of Staff Joint Publication 3-11 provides the joint service doctrine to enable combatant commanders and subordinate joint force commanders (JFCs) to develop plans, conduct training, and execute missions in an NBC environment.<sup>34</sup>

In the event of a WMD incident and following the President's declaration of a major disaster or emergency, initial national-level requests for military support are made through the Director of Military Support (DOMS), who represents the DOD executive agent (Secretary of the Army) for provision of military assistance to civil authorities. DOMS provides national-level oversight of the Defense Coordinating Officer (DCO) function. Subsequent requests for military support at the Disaster Field Office (DFO) are processed through the DCO—the military official specifically designated to orchestrate DOD support.<sup>35</sup>

The DCO is the single point of contact in the field for coordinating and validating the use of DOD resources (excluding those provided by the U.S. Army Corps of Engineers when operating as the primary agency for Emergency Support Function [ESF] #3—Public Works and Engineering, and those of the National Guard forces operating under State control) and is the designated DOD on-scene member of the Emergency Response Team (ERT). He coordinates Requests for Federal Assistance (RFAs) and mission assignments with the Federal Coordinating Officer and is supported on scene by a Defense Coordinating Element (DCE). The DCE consists of administrative staff and liaison personnel, including Emergency Preparedness Liaison Officer (EPLO), who normally will collocate with the ERT Operations Section.<sup>36</sup>

Specific responsibilities of the DCO include validating requirements for military support, forwarding mission assignments to the appropriate military organization(s), and assigning military liaison officers to provide technical assistance to applicable activated ESFs. The DCO refers problematic or contentious military support issues to DOMS for resolution at the national level.<sup>37</sup>

When responding to incidents involving NBC or highly explosive agents or materials, the JTF-CS commander: exercises OPCON of all allocated DOD assets (except USACE personnel executing ESF #3 missions and the Joint Special Operations Task Force); provides personnel, equipment and supplies to the affected area; and provides disaster response support based on mission assignments received through the DCO. In the event the JTF commander supplants the DCO as the senior DOD representative, the DCO will continue to exercise the ERT staff function of mission assignment coordination and validation, and will act as liaison between the ERT staff and the JTF-CS staff.<sup>38</sup>

### **Operational Assessment**

The key to achieving unity of command and unity of effort for America's homeland defense depends upon establishing a clearly defined national strategy from which well-defined mission statements can be derived. Based on the assigned missions, doctrine can be established to guide the development of concepts of operation, coordinate interagency relationships, and guide the formulation of operating plans. However:

One of the major deficiencies in federal efforts to combat terrorism is the lack of linkage between the terrorist threat, a national strategy, and agency resources. Much of the federal efforts to combat terrorism have been based upon vulnerabilities rather than an analysis of credible threats.... [A]gencies have used and are still using improbable "worst case scenarios" to plan and develop programs. While there has been a major effort to develop a national strategy, to date the strategy does not include a clear desired outcome to be achieved. Resources to combat terrorism have increased in terms of both budgets and programs. These increased resources have not been clearly linked to a threat analysis and ... some agency initiatives appear at odds with the judgments of the intelligence community. This situation also creates the potential for agencies to develop their own programs without adequate coordination, leaving the potential for gaps and/or duplication.<sup>39</sup>

Indeed, gaps do exist in the current interagency coordination that could pose a major problem during a WMD incident response. Under the current FRP, FBI-led crisis



management activities and FEMA-led consequence management activities may occur concurrently if an apparent terrorist WMD incident occurs without warning and immediately produces major consequences. The FRP does not identify any specific criteria for the transfer of lead agency responsibility from the FBI to FEMA. Instead, the plan states that the lead agency role may be transferred from the FBI to FEMA once the Attorney General, in consultation with the directors of the FBI and FEMA, determines that the FBI no longer needs to function as the lead agency. This arrangement provides the maximum degree of flexibility to the lead agencies for management of any given event. However, in doing so, it also offers the greatest potential for confusion for the supporting agencies, especially those organizations such as JTF-CS who perform support functions throughout all phases of a terrorist incident.<sup>40</sup>

In addition to the need to resolve the ambiguity in the criteria for transfer of authority during a “no warning” WMD event, there is a need for improved coordination among federal, state, and local agencies. In some instances, federal agencies have developed assistance programs without coordinating them with existing state and local emergency management structures. This practice has generated confusion at the state and local levels. Furthermore, there continues to be confusion regarding the roles of the federal government versus the state and local governments at the site of a terrorist incident. Command and control relationships need to be further clarified.<sup>41</sup>

The restriction on the use of active duty military forces to support the designated LFA is another concern. “The U.S. Government’s plans for a catastrophic terrorist attack on the United States do not employ the full range of the Department of Defense’s (DOD’s) capabilities for managing large operations. Additionally, the interagency coordination and

cooperation required to integrate the DOD properly into counterterrorism planning has not been accomplished.”<sup>42</sup> Currently, DOD involvement in the event of a homeland WMD incident is limited to supporting the agencies that are currently designated as having the lead in a terrorism crisis. However, in exceptional circumstances, if a catastrophe should exceed the capabilities of local, state, and other federal agencies, or if it is directly related to an armed conflict overseas, the President may wish to designate DOD as the lead federal agency. Any such proposal would give rise to serious legal and policy issues that would require careful consideration to safeguard American civil liberties. Prior decisions regarding the criteria for determining when, if ever, to implement this option would allow operational commanders to: clarify the roles of various organizations within the DOD; establish the framework to support interagency coordination and communications; and conduct the necessary deliberate planning to allow the most effective deployment of U.S. forces.<sup>43</sup>

Differences in terminology complicate coordination between federal agencies. For example, the FBI definition of “counterterrorism” refers to the full range of the organization’s activities directed against terrorism, including preventive and crisis management efforts. Conversely, the DOD definition of “counterterrorism” refers to offensive measures to prevent, deter, and respond to terrorist attack, while the DOD uses the term “antiterrorism” to refer to defensive measures taken to reduce the vulnerability of individuals and property to terrorist acts. These differences in terminology increase the likelihood of misunderstandings between agencies and could promote the growth of gaps in planning or in the development of capabilities.<sup>44</sup>

According to intelligence agencies, conventional explosives and firearms continue to be the weapons of choice for terrorists. Terrorists are less likely to use WMD agents, in part, because they are more difficult to obtain, develop, and

weaponize or otherwise disseminate. However, the likelihood that terrorists may use chemical and biological materials may increase over the next decade.<sup>45</sup>

From June 1995 to June 1998, federal agencies conducted 201 counterterrorism exercises.

Approximately 20 percent of these exercises employed both a WMD weapon and conventional explosives, approximately 49 percent employed only a WMD weapon, and the remainder, approximately 31 percent, employed only conventional explosives. Moreover, approximately 92 percent of the 89 WMD exercises led by the DOD had WMD scenarios.<sup>46</sup> Based on the intelligence agency assessment cited above, previous training scenarios have overemphasized the WMD threat and have underemphasized the conventional explosives threat. Certain aspects of each type of WMD incident response may well be the same, regardless of which scenario occurs. Nevertheless, if the objective is to develop and maintain capabilities to address the most likely WMD threat scenarios, training exercises should be structured accordingly, based on the outcome of threat assessments.

The Nunn-Lugar-Domenici legislation assigned DOD a major role in training first responders for a WMD incident. Specifically, it directed DOD, in conjunction with FEMA and other agencies, to conduct training to assist state and local agencies in preparing for the consequences of a WMD incident. As a result, DOD initiated a “train the trainer” program that relied on multi-agency teams to provide training to the local authorities’ training organizations in 120 U.S. cities. The cities were selected based on their core population. Once the training had been provided, the local training organizations, in turn, were to be responsible for training the local responders in their communities. Responsibility for this program transferred from the DOD to the Department of Justice (DOJ) on 1 October 2000, at which time 105 of the designated cities had received the training. Due to a lack of funding, however, DOJ has not continued the program. As a result, any one of the 15 cities without

trained responders may lack the capabilities to react effectively to a WMD incident and, consequently, will be more likely to require federal assistance. Additionally, the lack of prior training will almost certainly complicate coordination of federal response efforts in these locales.<sup>47</sup>

The First Annual Report to the President and the Congress of the Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction (December 15, 1999), better known as the Gilmore Panel, echoed many of the problems identified above:

1. Federal programs addressing terrorism appear, in many cases, to be fragmented, overlapping, lacking focus, and uncoordinated.
2. A terrorist group would face many difficulties in acquiring or developing and delivering a device with the capability to cause mass casualties.
3. The United States should reconsider the “worst case scenario” assessments that have dominated domestic preparedness planning for CBRN [Chemical, Biological, Radiological and Nuclear] terrorism.
4. There should be a comprehensive and articulate assessment of potential credible terrorist threats as part of a risk and vulnerability assessment.
5. It is not always clear “who is in charge” at the federal and state or local level when an incident occurs.
6. There should be agreed-upon templates for local to Federal handoffs of command and control, and these should be exercised in advance.
7. A national strategy—beyond the existing Attorney General’s Plan—is needed to address domestic preparedness and CBRN terrorism.<sup>48</sup>

### **Recommendations**

The range of deficiencies identified above is cause for concern and calls into question whether or not the United States’ homeland consequence management capabilities are, in fact, adequately prepared to deal with the threat of terrorist employment of WMD. A number of government studies have expressed much less optimistic conclusions. Indeed, the most recent study conducted by The U.S. Commission on National Security warned that “without significant reforms, American power and influence cannot be sustained.”<sup>49</sup> The Commission

went on to recommend sweeping changes, including the creation of a National Homeland Security Agency, and unification of the Coast Guard, the Customs Service, the Federal Emergency Management Agency and the Border Patrol into a new homeland security body, whose director would have cabinet status. Additionally, the Commission recommended changing the main focus of the National Guard to address the prospect of an attack on U.S. soil. According to former senator Warren Rudman, “The threat is asymmetric and we’re not ready for it.”<sup>50</sup>

If undertaken, full implementation of such far-reaching changes will obviously require years to accomplish and will have major repercussions on the DOD and the other affected agencies. Substantial near-term improvement in consequence management operational readiness is necessary in the interim. This can and should be accomplished through modifications in the current consequence management program. The following recommendations are offered as a point of departure for achieving these near-term improvements:

1. Seek National Security Council (NSC) clarification of the national terrorism strategy. Lack of clarity regarding the desired outcome (the ends) precludes the various federal departments and agencies from developing a common vision. A clear and unambiguous strategy will allow the ways and means required to achieve the overall strategic objective to be identified, thereby facilitating unity of effort and eliminating the development of redundant capabilities.
2. Establish WMD consequence management capabilities based on threat assessments and risk analyses. For each threat scenario, consider the probability of a successful attack and the probability for each potential outcome associated with the attack

(e.g., catastrophic, critical, marginal, or negligible). Training and resources should be focused primarily on those scenarios with the highest probability of occurrence and the potential for the most severe destruction. It is impossible to prepare for every potential vulnerability. Focusing preparations on thwarting the most likely and most destructive WMD incidents will maximize the deterrent capability attained within each organization's constrained resources.<sup>51</sup>

3. Clarify the criteria governing which agency has the lead during all phases of a WMD incident. Standardized criteria must be identified and published in both crisis management and consequence management response plans to preclude misunderstandings at the local, state or federal level during an actual WMD incident. Additionally, publication of these transition criteria will allow agencies to develop training scenarios to exercise coordination capabilities and, by doing so, preclude costly delays and confusion during an actual WMD incident.
4. Seek National Command Authority clarification of the role for DOD in the event of a catastrophic WMD incident. Prepare deliberate plans and establish the framework to support interagency coordination and communications, as necessary.

### **Conclusions**

Asymmetric use of WMD provides the means for potential adversaries to threaten the U.S. homeland and America's critical strengths and, by doing so, preclude the U.S. from achieving its strategic objectives. America has sought to address this vulnerability through a strategy of counterproliferation based on deterrence. Through effective consequence management, it is possible to minimize the potential death and destruction from a WMD incident, thereby diminishing the adversary's triumph. PDD-39 and Nunn-Lugar-Domenici

provide the basis for the U.S. response to terrorist use of WMD by establishing the crisis management and consequence management programs. Although significant progress has been made in implementing these programs, deficiencies remain in the areas of coordination, threat assessment, and training. Several government commissions have indicated the need for a major restructuring of the U.S. homeland defense program. Such initiatives will require years to implement, however. Significant near-term improvements in current consequence management capabilities, on the other hand, can be achieved by clarifying the national strategy and the desired outcome, focusing training, pursuing new capabilities based on threat-based risk assessments, and improving coordination. A prompt and urgent implementation of these steps will achieve the near-term improvement that the current state of consequence management demands. Only by this means will adversarial attacks be adequately deterred.

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<sup>1</sup> Ivan Eland, "Protecting the Homeland: The Best Defense Is to Give No Offense," Policy Analysis, no. 306, 5 May 1998, 7, <<http://www.cato.org/pubs/pas/pa-306.htm>> [18 January 2001].

<sup>2</sup> Joint Chiefs of Staff, "Joint Vision 2020," June 2000, Lkd., Joint Vision 2020 Publication at "Future Warfare Home Page," 1, <<http://www.dtic.mil/jv2020/jvpub2.htm>> [15 December 2000].

<sup>3</sup> Ibid., 3.

<sup>4</sup> Joint Chiefs of Staff, "DOD Dictionary of Military and Associated Terms," Lkd., Joint Publication 1-02 at "Joint Electronic Library," February 2001, <<http://www.dtic.mil/doctrine/jel/doddict/>> [3 January 2001].

<sup>5</sup> Department of Defense, "Proliferation: Threat and Response," January 2001, 69, <<http://www.defenselink.mil/pubs/ptr20010110.pdf>> [15 December 2000].

<sup>6</sup> Eland, 7.

<sup>7</sup> Richard A. Falkenrath, Robert D. Newman, and Bradley A. Thayer, America's Achilles' Heel: Nuclear, Biological, and Chemical Terrorism and Covert Attack (Cambridge: MIT Press, 1998), xvii.

<sup>8</sup> Department of Defense, 109.

<sup>9</sup> Falkenrath, Newman, and Thayer, 3.

<sup>10</sup> Ibid., xvii.

<sup>11</sup> Ibid., 99.

<sup>12</sup> Ibid., 98.

<sup>13</sup> Ibid., 114.

<sup>14</sup> Eland, 40.

<sup>15</sup> Lansing E. Dickinson, "The Military Role In Countering Terrorist Use of Weapons of Mass Destruction," The Counterproliferation Papers: Future Warfare Series, no. 1, September 1999, 8-9, <<http://www.maxwell.af.mil/au/awc/awcgate/cpc-pubs/dickinson.htm>> [26 January 2001].

<sup>16</sup> Falkenrath, Newman, and Thayer, 113.



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<sup>17</sup> Ibid., 98-103.

<sup>18</sup> Ibid., 100-101.

<sup>19</sup> Ibid., 217-218.

<sup>20</sup> Ibid., 249.

<sup>21</sup> Ibid., 167-169.

<sup>22</sup> Ibid., 179-182.

<sup>23</sup> Federal Emergency Management Agency, “Federal Response Plan,” 9230.1-PL, (Washington, DC: April 1999), 1, <<http://www.fema.gov/r-n-r/frp/frpfull.pdf>> [3 January 2001].

<sup>24</sup> Ibid.

<sup>25</sup> Ibid., TI-2.

<sup>26</sup> Ibid., 3.

<sup>27</sup> General Accounting Office, “Combating Terrorism: Federal Agencies’ Efforts to Implement National Policy and Strategy”, Report to Congressional Requesters (Washington, DC: September 1997), 17, <<http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.21&filename=ns97254.pdf&directory=/diskb/wais/data/gao>> [ 4 January 2001].

<sup>28</sup> Federal Emergency Management Agency, TI-3.

<sup>29</sup> General Accounting Office, 19.

<sup>30</sup> Ibid., 20.

<sup>31</sup> Joint Chiefs of Staff, “Joint Doctrine for Operations in Nuclear, Biological, and Chemical (NBC) Environments,” Lkd., Joint Publication 3-11 at “Joint Electronic Library,” 11 July 2000, VI-7, <[http://www.dtic.mil/doctrine/jel/new\\_pubs/jp3\\_11.pdf](http://www.dtic.mil/doctrine/jel/new_pubs/jp3_11.pdf)> [22 December 2000].

<sup>32</sup> Joint Task Force Civil Support Home Page, <<http://www.jfcom.mil/jtfc/index.htm>> [3 January 2001]

<sup>33</sup> Joint Chiefs of Staff, “Joint Doctrine for Operations in Nuclear, Biological, and Chemical (NBC) Environments,” VI-8.

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<sup>34</sup> Department of Defense, 78.

<sup>35</sup> Ibid., 15.

<sup>36</sup> Ibid.

<sup>37</sup> Ibid.

<sup>38</sup> Ibid., 16.

<sup>39</sup> Norman J. Rabkin, "Statement," U.S. Congress, House, Committee on Transportation and Infrastructure, Combating Terrorism: Issues in Managing Counterterrorist Programs Hearings before the Committee on Transportation and Infrastructure, 6 April 2000, 1-2, <<http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.21&filename=ns00145t.pdf&directory=/diskb/wais/data/gao>> [7 January 2001].

<sup>40</sup> General Accounting Office, 58.

<sup>41</sup> Rabkin, 2.

<sup>42</sup> Department of State, "Countering the Changing Threat of International Terrorism," Report of the National Commission on Terrorism, 5 June 2000, 39, <<http://w3.access.gpo.gov/nct/>> [26 January 2001].

<sup>43</sup> Ibid., 39-41.

<sup>44</sup> General Accounting Office, 16.

<sup>45</sup> General Accounting Office, "Combating Terrorism: "Analysis of Federal Counterterrorist Exercises", Briefing Report to Congressional Committees (Washington, DC: June 1999), 23, <<http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.88&filename=ns99157b.pdf&directory=/diskb/wais/data/gao>> [5 January 2001].

<sup>46</sup> Ibid., 22-23.

<sup>47</sup> Jim Warrington, "Domestic Preparedness, Technical Assistance, and WMD Installation Preparedness," Naval War College Lecture, 24 January 2001.

<sup>48</sup> Rabkin, "Statement," 11-12.

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<sup>49</sup> Steven Mufson, "Overhaul of National Security Apparatus Urged: Commission Cites U.S. Vulnerability," Washington Post, 1 February 2001, A02  
<<http://www.washingtonpost.com/wp-dyn/articles/A8824-2001Jan31.htm>> [2 February 2001].

<sup>50</sup> Ibid.

<sup>51</sup> General Accounting Office, "Combating Terrorism: Threat and Risk Assessments Can Help Prioritize and Target Program Investments," Report to Congressional Requesters (Washington, DC: April 1998), 6-8, <<http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.88&filename=ns98074.pdf&directory=/diskb/wais/data/gao>> [ 4 January 2001].

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